

IN THE CLAIMS

Please amend the claims as follows:

1. (Canceled)

2. (Canceled)

3. (Currently Amended): [[The apparatus according to claim 2, which includes]] A design support apparatus which supports a design of a product, the apparatus comprising:  
a data generator which generates parts/material data including parts composing the product, kinds of materials composing the parts and mass of each of the materials that differ in kind;

a setting unit configured to set an evaluation condition;

an evaluation unit configured to evaluate a recyclability of the product, using the evaluation condition and the parts/material data;

an analysis unit configured to analyze a factor obstructing the recyclability based on an evaluation result of the evaluating unit;

an output unit configured to output a remedy for an obstruction factor provided as an analysis result of the analysis unit; and

an update unit configured to update, based on the remedy outputted, the evaluation condition and the parts/material data which are used in the evaluation by the evaluation unit, and wherein the evaluation unit is configured to evaluate a recyclability of the product based on the updated evaluation condition and the updated parts/material data, and the output unit is configured to output an updated evaluation result of the evaluation unit.

4. (Currently Amended): The design support apparatus according to claim 3, which further comprises a conversion unit configured to convert the parts/material data used in the evaluation by the evaluation unit to Computer Aided Design (CAD) [[CAD (computer aided

design))]] data including a name of parts composing the product and a quantity or [[the]] a number of the parts.

5. (Currently Amended): The design [[aid]] support apparatus according to claim [[2]] 3, wherein the output unit comprises a display unit configured to display at least one part and material having [[high]] higher recyclability than the parts and the materials and used as a substitute for the parts and the materials corresponding to the obstruction factor.

6. (Currently Amended): The design [[aid]] support apparatus according to claim [[2]] 3, wherein the output unit comprises a display unit configured to display a demountable portion of the parts and materials corresponding to the obstruction factor as a recyclability remedy.

7. (Currently Amended): A design support apparatus which supports a design of a product, comprising:

- a data generator which generates parts/material data including parts composing a product, kinds of materials composing the parts and mass of each of the materials that differ in kind;

- a setting unit configured to set an evaluation condition;

- a first evaluation unit configured to evaluate an environmental load occurring in a recycling of the product, using the parts/material data and the evaluation condition;

- an analysis unit configured to analyze an aggravation factor of the environmental load based on an evaluation result of the evaluation unit;

- a first display unit configured to display a remedy for the aggravation factor according to an analysis result of the analysis unit;

- an update unit configured to update the evaluation condition and the parts/material data used in the evaluation by the evaluation unit, using the remedy displayed on the first display unit;

- a second evaluation unit configured to evaluate the environment load based on updated evaluation condition and parts/material data obtained by the update unit;

- a second display unit configured to display an evaluation result of the second evaluation unit; and

a conversion unit configured to convert the parts/material data used in evaluation by the second evaluation unit to Computer Aided Design (CAD) data including names of the parts composing the product, a quantity of the parts or [[the]] a number of the parts.

8. (Currently Amended): The design [[aid]] support apparatus according to claim 7, wherein the first display unit displays part/material having a lower environmental load than the part/materials and used as a substitute for the part/material corresponding to the obstruction factor as a recyclability remedy.

9. (Currently Amended): The design [[aid]] support apparatus according to claim 7, wherein the first display unit displays a demountable portion of the part/material corresponding to the aggravation factor of the environmental load as the remedy.

10. (Currently Amended): A design support apparatus which supports a design of a product, comprising:

a data generator which generates parts/material data including parts composing a product, kinds of materials composing the parts and mass of each of the materials that differ in kind;

a setting unit configured to set an evaluation condition;

a first evaluation unit configured to evaluate a recyclability of the product and an environmental load occurring in a recycling of the product, using the evaluation condition and the parts/material data;

an analysis unit configured to analyze an obstruction factor of the recyclability and an aggravation factor of the environmental load based on an evaluation result of the evaluation unit;

a first display unit configured to display a remedy for the obstruction factor and the aggravation factor according to an analysis result of the analysis unit;

an update unit configured to update the evaluation condition and the parts/material data used in the evaluation by the evaluation unit, based on the remedy displayed on the first display unit;

a second evaluating unit configured to evaluate the recyclability of the product and the environment load, using updated evaluation condition and parts/ material data which are obtained by the update unit;

a second displaying unit configured to display an evaluation result of the second evaluating unit; and

a conversion unit configured to convert the parts/material data used in evaluation by the second evaluation unit to Computer Aided Design (CAD) data including names of parts composing the product, a quantity of the parts or ~~[[the]]~~ a number of the parts.

11. (Canceled)

12. (Currently Amended): ~~[[The method according to claim 11, which includes]]~~ A method for supporting a design of a product comprising:

evaluating a recyclability of the product based on parts/material data including parts composing a product, kinds of materials composing the parts and mass of each of the materials that differ in kind;

analyzing an obstruction factor of the recyclability of the product based on an evaluation result of the recyclability;

displaying a remedy for the obstruction factor according to an analysis result; and  
updating evaluation condition and the parts/material data used in the evaluation according to the remedy displayed, and displaying the evaluation result of the recyclability based on updated evaluation condition and parts/material data.

13. (Currently Amended): The method according to claim ~~[[11]]~~ 12, which includes converting the updated parts/material data to CAD data including names of parts composing the product, a quantity of the parts and ~~[[the]]~~ a number of the parts.

14. (Currently Amended): The method according to claim ~~[[11]]~~ 12, which includes displaying part/material having a ~~[[high]]~~ higher recyclability than the part/materials and used as a substitute for the part/materials corresponding to the obstruction factor as a recyclability remedy.

15. (Currently Amended): The method according to claim ~~[[11]]~~ 12, which includes displaying a demountable portion of the part/material corresponding to the obstruction factor as a recyclability remedy.

16-38. (Canceled)

39. (New): A design support apparatus for supporting a design of a product based on an evaluation result of recyclability of the product, the apparatus comprising:

a first memory to store for each part, parts basic data including a kind of material composing a part and mass of the material of each kind:

a data generator to generate, for each of parts composing the product, parts material data including a kind of material composing each part and mass of each kind of material;

a second memory to store, for every combination of materials, a table including information indicating at least one of a permissible value with respect to compounding ratio of the combination, a separation admissibility for the combination, level of compatibility of the combination, and marketability of the combination;

a first evaluator to evaluate, for each part in the parts material data, (a) whether the part is composed of a plurality of materials of different kinds and (b) recyclability of the product including a mixture admissibility of a plurality of material which relates to at least one of the combination of the materials of the part and the combination ratio thereof, information representing an ability to separate the combination, a level of compatibility of the combination, and merchantability of the combination, referring to the table when the part is not composed of a plurality of materials of different kinds;

a calculator to calculate, for each part, a mass of the material of the part that recycling is impossible, based on an evaluation result of the first evaluator;

a display to display the parts in order of decreasing mass;

a first analyzer to check whether the part is composed of a plurality of materials of different kinds for each part, referring to the parts material data, and display on the display as an obstruction factor of recyclability of the part a condition that collectable materials and recycling rate are limited when the part is composed of a plurality of materials of different

kinds and a remedy of the obstruction factor to change the part to a part composed of a single material; and

a second analyzer to check whether the part is composed of a plurality of materials of different kinds for each part, referring to the part material data, and display on the display as an obstruction factor of recyclability of the part a condition that the part is composed of materials of a plurality of kinds and an evaluation result of the mixture admissibility indicates no mixture admissibility; and display on the display information relating to at least one of (a) changing the part to a part composed of a single material, (b) dismantling the part for every kind of material and (c) changing the material to a mixture permissible material.

40. (New): A design supporting method for supporting a design of a product based on an evaluation result of recyclability of the product, the method comprising:

storing, in a first memory for each part, parts basic data including a kind of material composing a part and mass of the material of each kind;

generating, for each of parts composing the product, parts material data including a kind of material composing each part and mass of each kind of material;

storing, in a second memory for every combination of materials, a table including information indicating at least one of a permissible value with respect to compounding ratio of the combination, a separation admissibility for the combination, level of compatibility of the combination, and marketability of the combination;

evaluating, for each part in the parts material data, (a) whether the part is composed of a plurality of materials of different kinds and (b) recyclability of the product including a mixture admissibility of a plurality of materials which relates to at least one of the combination of the materials of the part and the combination ratio thereof, information representing whether the ability to separate the combination, a level of compatibility of the combination, and merchantability of the combination, referring to the table when the part is not composed of a plurality of materials of different kinds;

calculating, for each part, a mass of the material of the part that recycling is impossible, based on an evaluation result of the first evaluator;

displaying the parts in order of decreasing mass;

checking whether the part is composed of a plurality of materials of different kinds for each part, referring to the parts material data;

displaying on the display as an obstruction factor of recyclability of the part a condition that collectable materials and recycling rate are limited when the part is composed of a plurality of materials of different kinds and a remedy of the obstruction factor to change the part to a part composed of a single material;

displaying on the display as an obstruction factor of recyclability of the part a condition that the part is composed of materials of a plurality of kinds and an evaluation result that the mixture admissibility indicates no mixture admissibility; and

displaying on the display information relating to at least one of (a) changing the part to a part composed of a single material, (b) dismantling the part for every kind of material and (c) changing the material to a mixture permissible material.

41. (New): A computer readable storage medium storing instructions of a computer program for supporting a design of a product based on an evaluation result of recyclability of the product, which when executed by a computer results in performance of steps comprising:

storing, in a first memory for each part, parts basic data including a kind of material composing a part and mass of the material of each kind;

generating, for each of parts composing the product, parts material data including a kind of material composing each part and mass of each kind of material;

storing, in a second memory for every combination of materials, a table including information indicating at least one of a permissible value with respect to compounding ratio of the combination, a separation admissibility for the combination, level of compatibility of the combination, and marketability of the combination;

evaluating, for each part in the parts material data, (a) whether the part is composed of a plurality of materials of different kinds and (b) recyclability of the product including a mixture admissibility of a plurality of materials which relates to at least one of the combination of the materials of the part and the combination ratio thereof, information representing the ability to separate the combination, a level of compatibility of the

combination, merchantability of the combination, referring to the table when the part is not composed of a plurality of materials of different kinds;

calculating, for each part, a mass of the material of the part that recycling is impossible, based on an evaluation result of the first evaluator;

displaying the parts in order of decreasing mass;

checking whether the part is composed of a plurality of materials of different kinds for each part, referring to the parts material data;

displaying on the display as an obstruction factor of recyclability of the part a condition that collectable materials and recycling rate are limited when the part is composed of a plurality of materials of different kinds and a remedy of the obstruction factor to change the part to a part composed of a single material;

checking whether the part is composed of a plurality of materials of different kinds for each part, referring to the part material data;

displaying on the display as an obstruction factor of recyclability of the part a condition that the part is composed of materials of a plurality of kinds and an evaluation result of the mixture admissibility indicates no mixture admissibility; and

displaying on the display information relating to at least one of (a) changing the part to a part composed of a single material, (b) dismantling the part for every kind of materials and (c) changing the material to a mixture permissible material.